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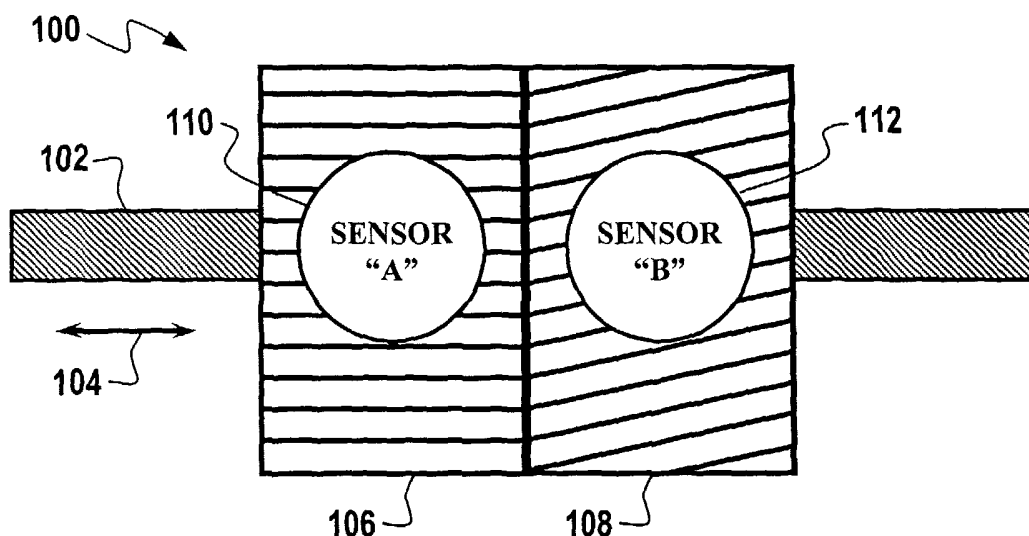
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ning of each regular issue of the PCT Gazette.

(54) Title: **LINEAR POSITION SENSING EMPLOYING TWO GEARTOOTH SENSORS**



(57) Abstract: Methods and systems for detecting the linear movement of a shaft (102) utilizing at least two gearthooth sensors and two gears, one helical gear (108) and one a normal spur gear (106). As the shaft (102) and gears translate in a linear direction (104), they are also rotating. Due to the fact one gear is a helical gear (108) and the other is not, as the shaft (102) translates mechanically, there will be a change in the phase between the output of a first gearthooth sensor (110) with respect to the second gearthooth sensor (112). This change in phase can be converted into linear travel using a simple calculation to detect the linear translation of the shaft (102).

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 287 214 A (SCHLUMBERGER ELECTRONICS UK) 19 October 1988 (1988-10-19) the whole document -----	1-12

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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		GB 2202949 A ,B	05-10-1988
		US 4833405 A	23-05-1989